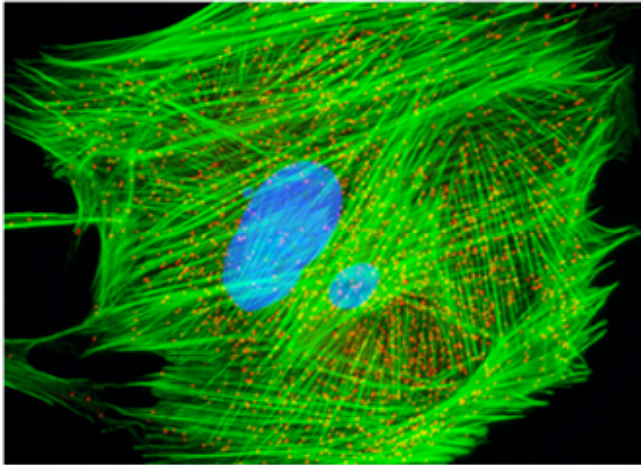


Peroxisomes are found in eukaryotes. Peroxisomal targeting signal-1 (PTS1) is a conserved tripeptide that is found at the C-terminus of more than 95% of all known peroxisomal matrix proteins. Pex5 is the PTS1 receptor and contains 7 conserved tetratricopeptide repeat (TPR) domains at its C terminus. We are studying how PTS1 binding to Pex5 is signaled to other downstream components (Pex14, Pex10, and Pex12) of the import machinery. Recent structural work suggests that a key to the Pex5 mechanism involves intrinsic disorder in Pex5. We are studying molecular dynamics in the N- and C-termini of Pex5 using fluorescence techniques.



*de Duve, Proc R Soc Lond B Biol Sci. 1969 173:71-83*